

## WEST Search History

DATE: Thursday, September 19, 2002

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP OR</i>			
L6	sampl\$4 near4 crystal\$8 near4 precipitat\$4	107	L6
L5	L4 near4 crystal\$8	66	L5
L4	lumen	44433	L4
L3	L1 same crystal\$8	1	L3
L2	L1 near4 crystal\$8	0	L2
L1	microvolume	233	L1

END OF SEARCH HISTORY

(FILE 'HOME' ENTERED AT 11:08:24 ON 19 SEP 2002)

FILE 'CAPLUS' ENTERED AT 11:08:40 ON 19 SEP 2002

L1 17490 S LUMEN  
L2 10 S L1 (2A) CRYSTAL?  
L3 1 S MICROVOLUME (2A) CRYSTAL?  
L4 0 S MICRO (1W) VOLUME  
L5 34 S MICRO (1W) VOLUME  
L6 1 S L5 AND CRYSTAL?

FILE 'STNGUIDE' ENTERED AT 11:17:42 ON 19 SEP 2002

FILE 'INSPIC' ENTERED AT 11:20:21 ON 19 SEP 2002

L7 1 S L2  
L8 34 S L3 OR L5  
L9 6 S L3 OR L6

L6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS  
 AN 1998:109901 CAPLUS  
 DN 128:228209  
 TI **Micro-volume** dynamic light scattering; and simultaneous  
 video microscopic observation for screening of protein **crystal**  
 growth  
 AU Wessel, Th.; Ricka, J.  
 CS Institute of Applied Physics, University of Bern, Bern, CH-3012, Switz.  
 SO Proceedings of SPIE-The International Society for Optical Engineering  
 (1998), 3199(Biomedical Systems and Technologies II), 299-305  
 CODEN: PSISDG; ISSN: 0277-786X  
 PB SPIE-The International Society for Optical Engineering  
 DT Journal  
 LA English  
 CC 9-16 (Biochemical Methods)  
 Section cross-reference(s): 0  
 AB Dynamic light scattering (DLS), video microscopic and ultra-microscopic  
 observation were simultaneously employed for screening of protein  
**crystal** growth in the vapor diffusion regime. The setup,  
 consisting of a modified microscope equipped with a laser sheet  
 (darkfield) illumination for ultra-microscopy, allows the visualization of  
 clusters in the nanometer range as well as of macroscopic **crystals**  
 parallel with the DLS measurements. The results of microscopic and  
 ultra-microscopic observations, the DLS autocorrelation functions and the  
 resulting relaxation time distributions for the std. protein lysozyme are  
 presented. The special conditions for dynamic light scattering  
 measurements in the pre and post crystn. phase with samples situated in  
 small droplets and covered by a std. crystn. plate are discussed.  
 ST dynamic light scattering; video microscopy; protein **crystal**  
 growth  
 IT Light scattering  
 (dynamic; micro-vol. dynamic light scattering and simultaneous video  
 microscopic observation for screening of protein **crystal**  
 growth)  
 IT **Crystal** growth  
 Optical fibers  
 (micro-vol. dynamic light scattering and simultaneous video microscopic  
 observation for screening of protein **crystal** growth)  
 IT Proteins, general, properties  
 RL: FEP (Physical, engineering or chemical process); PRP (Properties);  
 PRCO (Process)  
 (micro-vol. dynamic light scattering and simultaneous video microscopic  
 observation for screening of protein **crystal** growth)  
 IT Microscopy  
 (video; micro-vol. dynamic light scattering and simultaneous video  
 microscopic observation for screening of protein **crystal**  
 growth)

AN 1971:245744 INSPEC  
TI Electron-probe microanalysis.

AU Hornsveld, E.M.

SC Atoomenergie en haar Toepassingen (Dec. 1970) vol.12, no.12, p.321-8  
CODEN: AETPAY ISSN: 0004-7228

DT Journal

TC Practical

CY Netherlands

LA Dutch

AB Describes the principles of electron-probe microanalysis and gives details of the commercial Cameca machine and its use. The equipment is designed for the identification and estimation of the components in a selected

**micro-volume** at the surface of a solid specimen from electron micrographs and by the analysis of the characteristic X-rays emitted when the surface is bombarded by an electron micro-beam. The beam has a diameter of 0.1-1  $\mu$ m, and the equipment can deal with atomic numbers down to 5 (boron), and can detect about 100 p.p.m. in a volume of 10 cubic  $\mu$ m, the smallest amount detectable being 10-14 g.

Identification is via a **crystal** spectrometer or a scanning counter. Examples are given of the application of the technique to the examination of UB4 particles in a UO2 matrix, of an Al2O3-UO2 eutectic mixed with an excess of Al2O3; of Incoloy-800; and of coated particles.

CC A8280 Chemical analysis and related physical methods of analysis

CT ELECTRON PROBE ANALYSIS

ST electron probe microanalysis; Cameca machine; electron micrographs  
ET B\*U; UB4; U cp; cp; B cp; O\*U; UO2; O cp; Al\*O\*U; Al sy 3; sy 3; O sy 3; U sy 3; Al2O3; Al cp; Al2O3-UO2; Al\*O